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TIC

A MAGAZINE FOR
DENTISTS
DENTAL HYGIENISTS
DENTAL ASSISTANTS

Editor,
Joseph Strack

Contributing Editors,
Arthur H. Levine, D.D.S.
Joseph Murray, D.D.S.

Art Director,
Edward Kasper

August 1960 Vol. XIX No. 8

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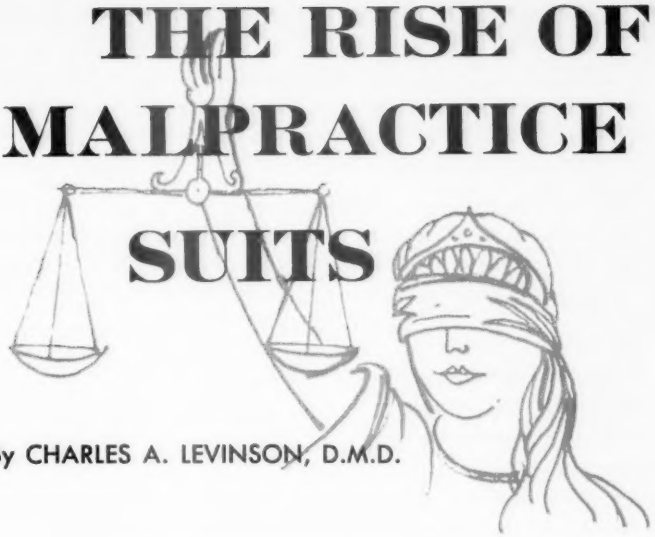
THE RISE OF MALPRACTICE SUITS



By CHARLES A. LEVINSON, D.M.D.

Examining and consulting dentist for leading insurance companies.

Chairman of the Liaison Committee of the Massachusetts Dental Society in joint conference with the Massachusetts Medical Society, the Boston Bar Association, and the Massachusetts Bar Association.

Through recommendation of Governor Foster Furcolo of Massachusetts, Dr. Levinson was appointed as specialist in medical dentistry to the Massachusetts Industrial Accident Board.

During the past 31 years, I have examined hundreds of dental malpractice claims in behalf of insurance carriers. Some of these claims are legitimate, others are grossly exaggerated, and still others are fraudulent. I would say that about 35 percent of these cases are dishonest.

During the past six months I have conducted a survey of both medical and dental malpractice claims for the entire country, for both the Massachusetts Medical Society and the Massachusetts Dental Society.

The question we were interested in was, Is there an increase in malpractice claims against dentists and physicians, nationwide and in Massachusetts?

Hundreds of reports came to my office from every insurance statistical source. The consensus was that there has been a very definite increase in malpractice claims throughout the United States.

Many very large malpractice verdicts are being handed down by juries. They had their beginning in California, particularly the San Francisco area; they have reached the Middle West and are now beginning to invade the East Coast.

Causes for Lawsuits

There are many reasons for malpractice lawsuits. Today people are very money- and lawsuit-conscious. The advent of compulsory motor vehicle liability insurance in Massachusetts has made the public more claim conscious. Judges and juries are liberal with insurance companies' money. Some verdicts against physicians and dentists in malpractice suits have been fantastically large.

There has been a gradual breakdown of traditional patient and general practitioner relationship. Do you remember the old family physician or dentist of yesteryear? He was a member of the

family. We loved him. We invited him to our parties and weddings. He came to our wakes and funerals. Would we ever think of suing him because he made a slight error? We overlooked everything he did, and we had faith in him. He was doctor, father confessor, and best friend. Where is this relationship today? Everyone is strange; the patient and the physician or dentist relationship is based upon a business agreement. "You fix my teeth, doc, and I'll pay you." Finis! So the family dentist and the family physician have disappeared, just like many other "good things," never to return.

Specialization in dentistry is more pronounced today than ever before. Since a patient is often treated by more than one dentist for a dental disturbance, he consciously or unconsciously expects more from the specialist than the general practitioner.

We observe that many patients expect a guaranteed cure from specialists without considering the complicated cases that such specialists are often called upon to treat.

The rendering of dental bills in cases where there is an unfavorable end result has a tendency to cause patients to avoid the payment of such fees either by charging malpractice or actually instituting a malpractice action against the dentist.

"WE'RE OUT OF AMALGAM."

Discouraging Lawsuits

Recently I represented the Massachusetts dentists at a joint conference of the New Hampshire Bar Association, the New Hampshire Medical Society, and the New Hampshire Dental Society. I described the liaison work in Massachusetts. A number of ideas were incorporated in the New Hampshire joint conference plan. Now in that state the bringing of a lawsuit immediately against a dentist or physician is discouraged. The New Hampshire Medical Society has set up a Medical Jurisprudence Committee that determines whether a case should be tried or settled, and the New Hampshire Dental Society has set up a Dental Jurisprudence Committee for the same purpose. The courts in New Hampshire have sustained the decisions of these committees in most malpractice claims.

In New York City there is set the Joint Liability Insurance Committee of the First and Second District Dental Societies.

The first district takes in Manhattan and Bronx; the second, Brooklyn and Staten Island. There are three insurance companies which write malpractice for these dental societies.

The Joint Liability Insurance Committee reviews all malpractice cases. These committees determine which cases should be settled and which cases defended in court.

The term dental malpractice, as ordinarily used in civil cases, has been defined as the failure on the part of a dentist to properly perform the duty which evolves upon him in his professional relationship to his patient, resulting in some injury or harm to the patient. It is fundamentally a breach of a duty arising out of the dentist-patient relationship.

The dentist must possess and exercise that degree of skill commonly possessed and exercised by other dentists practicing in the same community or locality. If he professes a specialty, he must possess and exercise that degree and skill and care commonly possessed and exercised by others practicing the same specialty in the same community or locality. He must keep abreast of the times, follow an approved method in general use, and exercise his best judgment. Malpractice may be the result of ignorance, willfulness, or negligence.

Some of the causes of malpractice claims, as alleged by claimants, are as follows:

1. Extractions, infection, retained roots, death following extractions, wrong tooth, fractured jaw, hemorrhage
2. Cuts by discs, stones, and so forth, especially owing to high speed drills
3. Heat and chemical burns
4. Broken needles and needles left in drains
5. Breach of contract and poor work
6. Falling handpiece, falling x-ray machine, fall from dental chair
7. Aspirated gold inlay, swallowing root canal reamer, and so forth

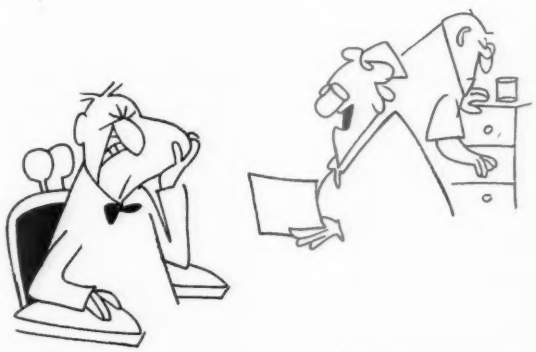
Here are rules every dentist should follow:

1. Avoid arguments with patients who complain of grievances, real or fancied. Keep on good personal terms with your patient.
2. Keep complete and accurate records.
3. Refrain from guaranteeing or promising a good result.
4. Follow approved methods of practice.
5. Be just as careful in your postoperative treatment as in the main operation.
6. When faced with an extraordinary situation, do not mark time, delay, or otherwise avoid the issue. You should face it squarely, and if in doubt should call in a brother dentist for consultation, preferably a specialist in the particular type of treatment.
7. Never conceal any important fact from your patient, even where you may fancy the patient will never discover the error, mistake or poor result.
8. When confronted by a serious question of law pertaining to dental practice, you should seek advice of your insurance company.
9. Do not criticize another practitioner's work.
10. Do not make any statement that may be construed by the patient as an admission of fault or guilt on your part.
11. Avoid accidents in the handling of caustic medicaments, butts, discs, stones, and so forth.
12. Make constant use of the x-ray. Do no surgical work without x-rays.
13. Do not release x-ray files or other records to the patient.
14. Use an assistant when general anesthesia is indicated.
15. Do not inform your patient or his representative that you carry malpractice insurance.
16. The courts require original records. Keep them.
17. Check and double-check the following:
    a. The manufacturer's instructions or warnings on drugs or appliances used.
    b. The labelling and contents of bottles and containers.
    c. The effects of any appliance used.
18. Have an understanding on fees where they are costly or where payment is a problem.
19. Avoid "short cuts" in arriving at a diagnosis.
20. Show a personal interest in your patient's progress and comfort.

In closing, I might relate an anecdote which goes back to my days as a freshman at Harvard Dental School. I was working my way through school by running an elevator. One of my elevator riders was the late Dr. William Richardson, former dean of the Harvard Medical School and benefactor of the Richardson House of the Boston Lying-In Hospital and the Hospital itself. One day I asked him what was the wisest thing for a dentist-to-be to keep in mind while practicing? He remarked: "The best doctors are those who know when *not to do a thing.*"

Practice this axiom during your professional life, and you'll keep out of trouble.

100 Boylston Street
Boston 16, Mass.



"LET'S SEE—YOU'RE SCHEDULED FOR A CLEANING."

POPULATION EXPLOSION

By KAY LIPKE

At the beginning of World War II, Covina, Calif., was a quiet, rural orange-growing center. It had five dentists amply able to take care of the dental needs of this community and several outlying towns as well.

Today Covina is a crowded, bustling city of over 20,000. Its closest neighbor, West Covina, which in 1946 had a population of about 1,600, has ballooned to over 49,000. It is said to be the fastest growing city in the United States. The main reason for the spectacular growth of West Covina is that the surging San Bernardino Freeway bisects the city and makes it a "bedroom" for young people who work in Los Angeles—28 miles and 25 minutes away by freeway—and want to bring up their families in the country.

Country? The orange groves are gone, ripped out to make way for thousands of small homes, huge shopping centers with big-city department stores, more churches, more schools, more dentists!

Over 75 dentists are extremely busy looking after the dental needs in the same general area where the five dentists operated not too long ago. In Covina there is a district completely set aside for physicians and dentists, with attractive professional buildings and a large 200-bed hospital catering to the whole valley.

According to two dentists who have practiced in Covina since the twenties, it has been a bewildering experience to live through this sudden population explosion. One of them said:

"It is a revolution. Once our patients were all people we knew. Now the majority of those who come to us are young people, strangers who have moved into the district because of industrial plants near by, or because one or more of the family work in Los Angeles, or in some other city within driving distance.

"We have never heard of them, and they have not been referred to us by anyone. They look us up in the classified telephone directory and, if they like the sound of our names, they come to us. We see them for a while and then they are gone. We have thousands of cards in our files of people who came once or twice and then moved on. We get lots of accident cases."

He also explained that it is difficult to get and to hold able dental assistants because of the competition between the large number of dentists in the neighborhood. One dental hygienist divides her time between them all.

He is no longer able to give the same service to old valued patients. Keeping up with a recall list has become a thing of the past, as is the old-time friendly, leisurely manner of handling financial matters. In his words, "Instead of country dentists, we had to become business men in a hurry, or starve to death." Dealing as they have with strangers with no references, they have had to be firm in the matter of finance.

On this both of the interviewed dentists agreed. One of them has geared his practice to the new, young population, and has built his own professional building and assembled a group of professional men around him.

The other has taken a more leisurely road on his dental career. He still practices in the older building where he has been all of his professional career, and continues to look after his older patients as before. Nearing the time of retirement, he has purposely discontinued doing children's dentistry. This fact has limited his practice, as most of the new population consists of young parents with lots of children. His wife assists him, and they close shop occasionally to take leisurely vacations.

The first influx of people came during the war as defense plants were built in nearby communities. After the war, the orange groves in and around Covina began to die, due to a disease called "Quick Decline." With this blight on the orange groves, the area was ripe for the entry of subdivision promoters. Los Angeles was becoming badly overpopulated. Young people looked to the more rural areas for a place to live and bring up their children. Dentists also found it a very pleasant place to live and work.

All over America the population explosion is being felt. The quiet rural community of yesterday is becoming the energetic, crowded, small city of today, and the teeming metropolis of tomorrow.

This picture compares the size of the room with Dr. Cooper's hand. The room is 2 1/16 inches long, 3/4 inch high, and 1 1/4 inches deep. It contains three windows complete with drapes; carpet; and 46 different pieces, including various wooden and upholstered furniture, silver, porcelains, cups and saucers, candlesticks with four candles each, fireplace complete with andirons, logs, and fireside set. The painting over the mantel is an actual oil painting in a gold frame 1/4 inch high. The room and contents are made to 1/144th scale and is a miniature of the miniature of Dr. Cooper's living room in his Hollywood home.

Small-Scale Artisan, Large-Scale Artist

By HARRY CIMRING, D.D.S.

When a dentist turns to a hobby, he puts down his dental engine, his burs and stones, his cotton tweezers, his wax patterns, his casting machine, his magnifying loupes, his knives and chisels, and all the other accoutrements of his profession.

Not so Dr. Joseph Cooper of Hollywood. When he turns to his hobby, he picks up his engine and loupes and his various dental instruments and equipment. His meticulously-scaled miniatures are award-winning, museum-sought and nationally newsworthy.

In the two decades since he decided to build his own model sailing ships in protest against the prices asked for them, Dr. Cooper has spent thousands of spare-time hours reproducing (an inch to a foot) his living room, entrance hall, dining room, and den in every detail, as well as the Almemar and Chadwick Chapel of Hollywood's Temple Israel.

Generally, in his exquisite projects he used the same material as that of the original being reproduced. Occasionally, to find special materials, he was forced into foraging trips. Frequently, especially with metal objects, he turned to his dental casting machine after carving the item in wax and duplicated it (to scale) by the so-called lost wax process. His chief aid, aside from his varied dental equipment, was a model-makers' motor tool (13 inches long), complete with miniature circular saw, sander and lathe. The doctor's penchant for detail and realism has resulted in drawers that pull out, doors that open, teapots that pour, lamps that light, and real logs in the fireplace.

Living Room

This room contained 18th century English furniture (some upholstered), lamps, candelabra, bric-a-brac, a fireplace, draperies, windows, and so forth; some 110 separate items in all. For the furniture, Dr. Cooper used his own manufacture of plywood; three pieces of 1/24-inch mahogany veneer glued together. From scale blueprints of each item (chair, table, secretary, chest), pieces are cut to size and shape and then glued together. No nails or screws are used. Glass items were made of lucite and porcelain items of cast metal painted over. The buttons on the upholstered chair are tiny heads of pins, also painted. Glowing ashes in the fireplace are bits of lucite plastic over a revolving colored disc powered by an electric clock motor. The drapes and upholstery are unbleached linen hand-painted.

Dining Room

This room duplicates the living room as to faithful and exquisite reproduction. Featured here is a crystal chandelier, complete with five lamps of the grain-of-wheat-bulbs. These are ½ inch in size and 1½ volts operating on regular house current reduced by a transformer and radio resistor. Many of the crystals are from an old-fashioned lady's beaded bag. There are silver candelabra and a serving set, silk curtains and a velveteen rug (dyed to the proper color). The windows admit light and the mirror (a lady's compact mirror) reflects it. The wallpaper was photographed to scale and then colored in.

Featured here is the Wedgewood porcelain lamp with the figures in bas-relief. It is 5/8 inch high. The loveseat has a hand-painted design on unbleached linen. The end-table is teakwood. The wiring of the lamp is hidden inside the right rear leg of the table, goes through a hole in the floor, and connects to a transformer and resistor hidden on the floor behind the bar.

Entry Hall

Of special interest here is the woodwork, especially on the stair-rail, the spindles and newel post, being turned out on his hobbyist's lathe. The doors have the proper hardware, and the lamp, wallpaper, tilt-top table and bric-a-brac are as tastefully reproduced as the originals.

Den

When Dr. Cooper completed his living room miniature, he placed it in his den as part of the decor. Then, when he reproduced his den, he found he had created a "miniature of a miniature" at a ratio of 1 to 144 or 1/12 of 1/12.

Almemar of Temple

This replica of the Almemar of the Temple Israel in Hollywood represents over a thousand hours of painstaking effort. It consists of the entire floor area of the Temple from the first row of seats to the pulpit and on beyond to the ark, including the choir room and organ loft. Most striking is the ark, which contains the Torah, scroll of the five books of Moses. Above are the lions of Judah supporting the ten command-

A miniature of the den. The den, which contains the miniature of Dr. Cooper's living room, is here reproduced in every detail to the scale of 1/12th. This picture shows the miniature of the miniature in the counter of the bar. On the shelf above are two ship models reproduced in 1/144th scale. They are complete with sails and rigging. The three table lamps have silk shades with oil painted designs and bulbs which light up, as do the antique sconces on the right wall. The love seat and chair are also exact copies of the originals. The three English hunting prints are framed under glass, the brass and copper chafing dish and tray is complete with alcohol burner. The walnut serving tray is inlaid with woods of different colors. The furniture is made of teakwood and mahogany, the walls and door of maple. The ceiling of the miniature living room is of translucent plastic above which are two bulbs that illuminate the room with a diffused light, which shows every detail clearly. A total of 13 bulbs operated by 7 circuits control the various lighting combinations. Total working time about 500 hours.

ments, atop of which is the crown of learning. The doors of the ark contain the design of the twelve tribes of Israel. To each side is a seven-branched candelabrum. In front is the pulpit from which the rabbi leads the prayer service and reads from the scroll of law. Flanking this is an auxiliary pulpit from which the cantor renders the musical service and recites the sanctification as he lifts the kiddush cup. All are located on a dais which is reached by two stairways from the temple floor. Hanging from above and in front of a huge curtain is an eternal lamp. Above the dais and to each side are the choir lofts, decorated on the exterior by various symbols of the holy days.

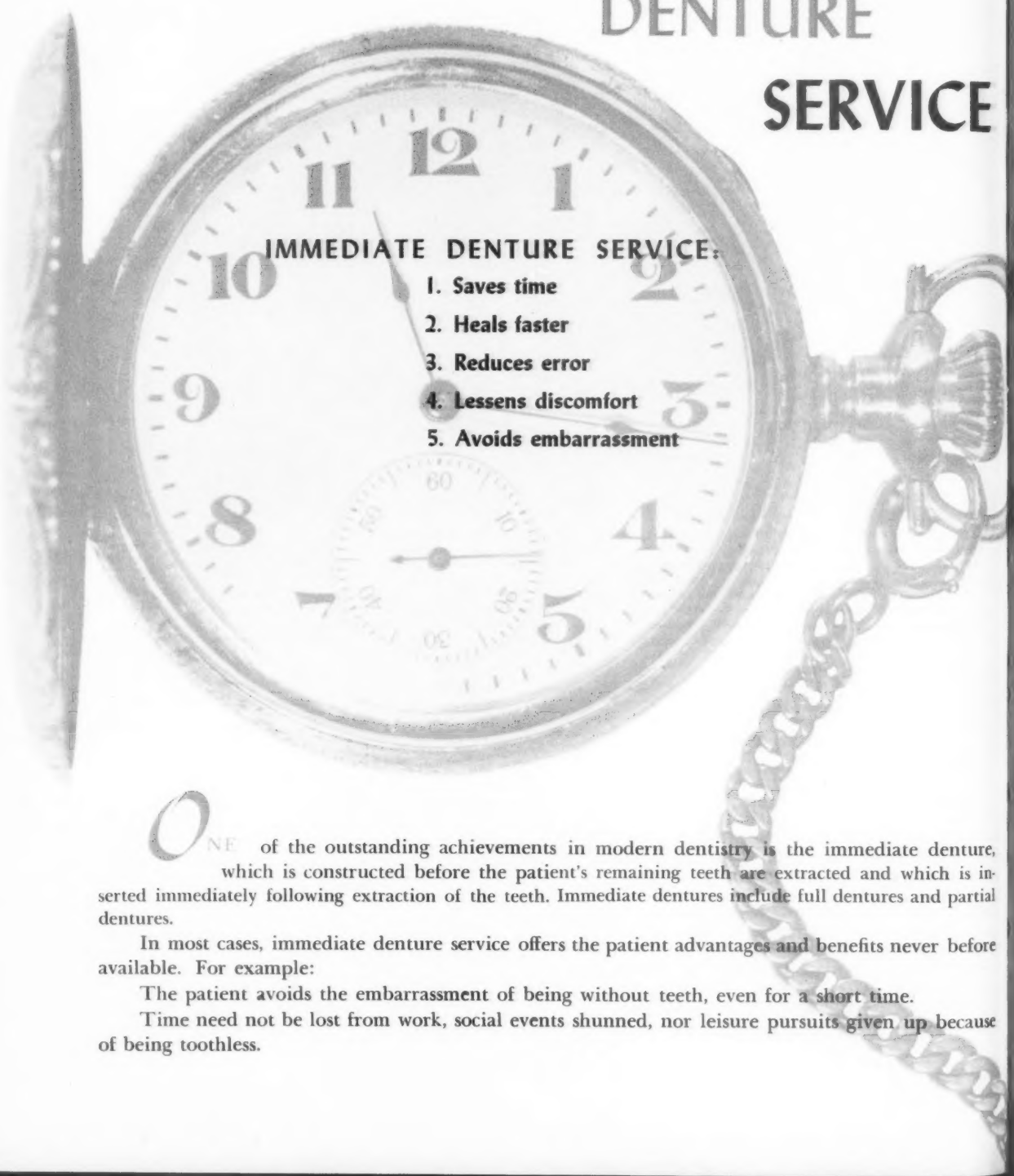
Woods used in construction were oak, walnut, maple, and white pine. Five varieties of marble, requiring a special cutting tool, and four kinds of metal were needed, not to mention fabrics and plastic. Five different processes were tried before the 7,000 triangles in the carpet seemed just right. Tiny gears open and close the ark doors, which automatically turn on a light. A light switch operates the eternal light.

Made up of similar elements (pulpit, ark, ten commandments, eternal light, candelabrum), but on a smaller scale and in a different artistic arrangement, is the Chadwick Chapel. The door panels of the ark depict Moses gazing at the summit of Mount Sinai. Above the ark are the ten commandments in the form of two columns of five white tablets each. The spectacular stained glass expanse at the rear as well as a wooden divider partition to the right are interesting adaptations in design of the seven-branched Menorah. To the left is a portion of the gardens, made, incidentally, of thin copper sheets and painted with oil colors.

240 So. La Cienega Boulevard
East Beverly Hills, Calif.

Today's Dental Magic

THE STORY OF IMMEDIATE DENTURE SERVICE



ONE of the outstanding achievements in modern dentistry is the immediate denture, which is constructed before the patient's remaining teeth are extracted and which is inserted immediately following extraction of the teeth. Immediate dentures include full dentures and partial dentures.

In most cases, immediate denture service offers the patient advantages and benefits never before available. For example:

The patient avoids the embarrassment of being without teeth, even for a short time.

Time need not be lost from work, social events shunned, nor leisure pursuits given up because of being toothless.

BOOK ONE: CHAPTER VIII

The contour and symmetry of the patient's face is maintained without telltale interruption.

The normal diet is not affected as much as it is with other dentures.

There is less pain and discomfort, for the immediate denture acts as a splint or bandage on an injured part of the body.

There is less bleeding.

The patient is not exposed to the risk of developing improper habits of speech and chewing, which sometimes occur during the intermediate period between extraction of the teeth and the construction and insertion of regular full dentures.

The immediate denture can duplicate precisely the size, shape, color, and arrangement of the natural teeth, because the dentist has the opportunity to study the patient's teeth and to make records of them before extraction.

Surgical shock is reduced, for extraction of the teeth is done in well planned stages.

In cases where the jaw relationships are abnormal, the malocclusion can be fully corrected.

The immediate denture protects the surgery-sensitive area of the mouth against irritation from foods, temperature changes, the tongue, and so forth.

The patient has a better mental attitude, especially if he is aware of the advantages and benefits of the immediate denture technic.

There is less chance of error in maintaining normal jaw relationships, for all normal conditions can be duplicated exactly.

Healing progresses more rapidly.

The transition from natural teeth to dentures is much smoother.

Immediate denture service is one of the most satisfying and remarkable accomplishments of modern dentistry for these and other reasons. But there are a number of situations in which it is not applicable. These conditions include a situation in which the age or general physical condition of the patient is such that extraction of six or more teeth at one time might not be advisable; where teeth are abscessed, or where seriously diseased gums are involved.

The dentist will explain to the patient that, as healing of the bone progresses, there will be gradual loss of retention and stability of the immediate denture. Thus it will be necessary to reline the immediate denture one or more times. In certain situations, over which the dentist has no control, it may even be necessary to remake the denture. The immediate denture may require relining in about six months, although these dentures have been known to function satisfactorily for years without relining.

The dentist will also prepare the patient for the most common unpleasant after-effect of the immediate denture procedure. This is swelling of the gums caused by the unusual amount of surgery done at one time and by the pressure exerted by the immediate denture on the soft tissues of the mouth. Sometimes this pressure, by arresting normal bleeding, forces blood into the facial tissues. The resulting edema may alarm the patient, unless he has been prepared for such a possible development.

These disadvantages, however, are few and, relatively, not serious, compared with the numerous and important benefits of this wonderful technic.

An immediate denture is the product of the cooperation of the patient, the dentist, the oral surgeon, and the laboratory technician.

For the patient, it can be an exciting piece of dental magic from a physiological, psychological, and esthetic viewpoint.

DENTAL CARE

INTERVAL AND FREQUENCY OF VISITS

ADAPTED FROM A REPORT PREPARED
By JANE W. BERGSTEN,
U. S. NATIONAL HEALTH SURVEY STAFF

SELECTED FINDINGS

Data from the U.S. National Health Survey revealed that only about one-third of the population of the United States visited their dentist within a one-year period. This finding was based on data collected in household interviews during July 1957-June 1958. When asked "How long has it been since you went to a dentist?," 23 percent of the population responded with time periods of less than 6 months and 14 percent from 6 to 11 months. Approximately 43 percent of the population reported time periods of one year or more, with an additional 18 percent indicating that they had never been to a dentist.

Only a small proportion of young children and older people had visited their dentist within the one-year period prior to interview, but about one half of those in the 5-24 year age range had been to a dentist within that time period.

The data revealed a definite relationship between family income and time interval since last dental visit. About 54 percent of persons in families having an annual income of $7,000 or more visited the dentist within the past year as compared with 19 percent of those in families having an income of less than $2,000.

The educational attainment of the family head was also related to dental care. Only 17 percent of persons in families whose head of family had less than 5 years of formal schooling had visited the dentist within a year prior to interview, as compared with 57 percent for members of families whose head of family had completed at least one year of college.

About 17 percent of nonwhite persons reported that their last dental visit was within the year, as compared with 39 percent for white persons. The proportions of persons who had never been to a dentist were the reverse of these, 37 percent of the nonwhite population as compared with 16 percent of the white population.

With respect to geographic region, 29 percent of the persons in the region designated as South visited a dentist within the past year. In the North Central region, 38 percent reported a dental visit within the past year, while corresponding percents for the West and Northeast were 39 and 43, respectively. Persons living in urban areas had 39 percent of their population visiting a dentist within the year while rural-nonfarm residents had 36 percent and rural-farm residents, 27 percent.

During the year July 1958-June 1959, information was collected on the number of dental visits a per-

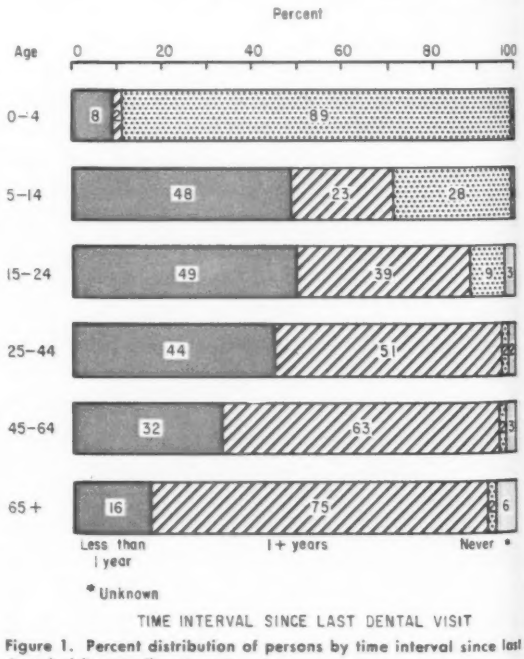


Figure 1. Percent distribution of persons by time interval since last dental visit according to age.

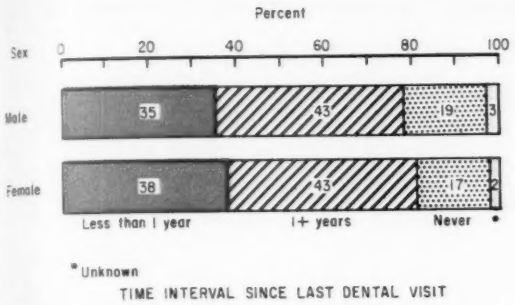


Figure 2. Percent distribution of persons by time interval since last dental visit according to sex.

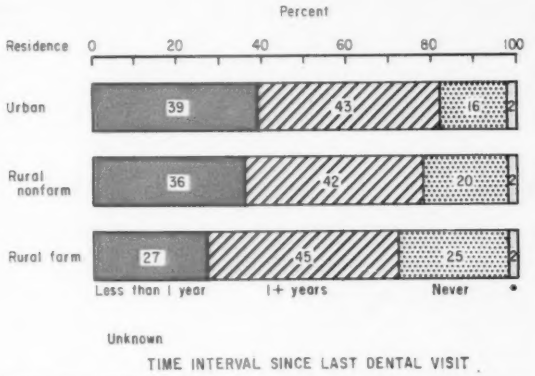


Figure 3. Percent distribution of persons by time interval since last dental visit according to residence.

son had made during the 12-month period prior to the week of interview. About 60 percent of the population reported no visits during the year preceding the interview, while 16 percent reported 1 dental visit. An additional 11 percent reported 2 visits, 4 percent reported 3 visits, and 9 percent reported that they had made 4 or more visits.

Source of Data

The information contained in this report was obtained from nationwide household interviews conducted by the U.S. National Health Survey. The survey is continuous, each week covering a random sample of the civilian noninstitutional population of the United States. This report is based on interviews obtained during the period July 1957-June 1959 during which time interviews were conducted in approximately 73,000 households throughout the country and included about 235,000 persons.

Time Since Last Dental Visit

Any visit to a dentist's office for treatment or advice was considered to be a dental visit in the survey, even if the service was not provided directly by a dentist himself but by a hygienist working under a dentist's supervision.

Since the data pertaining to time interval since last dental visit were collected during the course of a one-year period, they do not describe the population as of any one specific point in time but rather describe the average status of the population during the year of data collection.

The distribution of persons according to interval since last dental visit varied substantially from one age group to another. Figure 1 shows that only 8 percent of the children under 5 years of age had been to a dentist within the past year, while approximately half of those in the 5-24 year age group had been to a dentist within that period of time. The proportion then decreased for each succeeding age group, reaching a low of 16 percent for persons 65 years of age and over. It is not surprising that about 90 percent of the children under 5 years of age had never been to a dentist. However, it is surprising to find a substantial proportion of those in older age groups falling into this category. About one quarter of those 5-14 and one-tenth of those 15-24 years of age had never visited a dentist.

A greater proportion of females than of males had visited a dentist recently (fig. 2). This difference existed in each of the separate age groups, as well as for all ages combined.

Comparing the three residence groups, the data show that the proportion of people who had been to a dentist in the past year was greatest among urban residents, 39 percent, and smallest among rural-farm residents, 27 percent (fig. 3 and tables 3 and 4).

The Northeast region of the United States had a greater proportion of persons who had made a dental visit within a year prior to interview than any other region. The South had the smallest proportion while the North Central region and the West occupied middle positions (fig. 4). In the South, one fourth of the population had never been

Table A. Percent distribution of persons by number of dental visits during the year according to age: United States, July 1958-June 1959

Age	Number of dental visits during the year					
	Total	0	1	2-3	4+	Unknown
All ages	100	60	16	15	9	1
0-4	100	91	6	2	1	1
5-14	100	48	20	20	12	-
15-24	100	47	19	18	15	1
25-44	100	52	19	18	11	1
45-64	100	63	14	13	8	1
65+	100	81	8	6	4	1

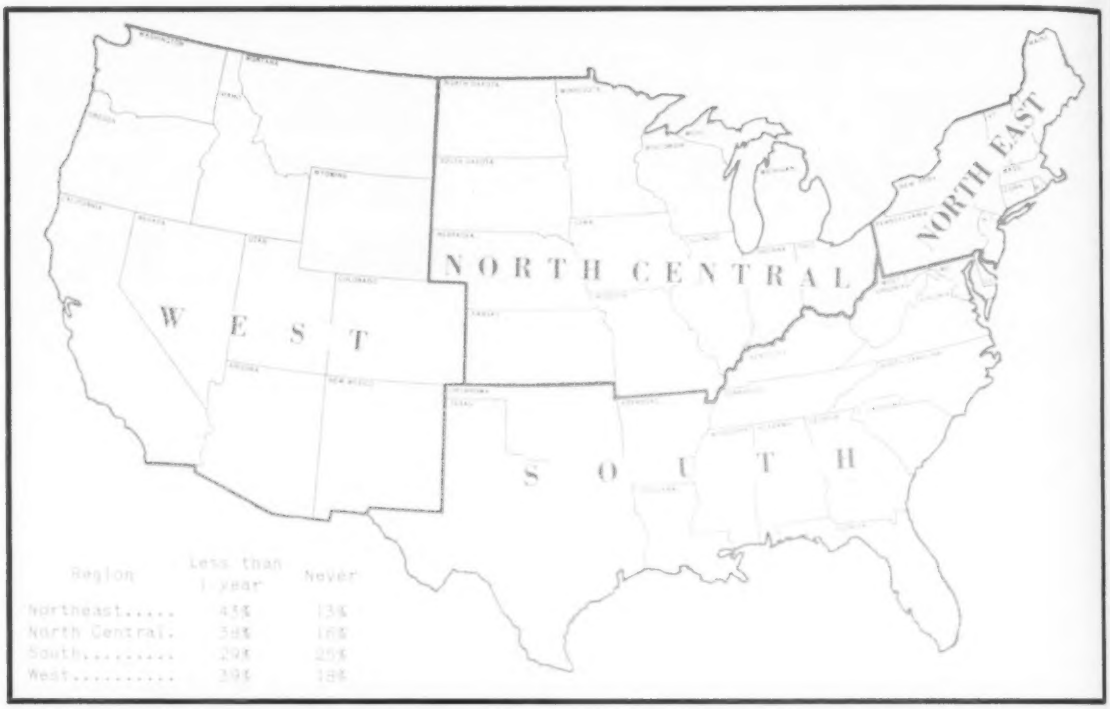


Figure 4. Percent of persons who have visited the dentist within the past year and percent who have never visited the dentist according to region.

to a dentist as compared with one eighth of the population of the Northeast. Similar differences occurred within the separate age groups (tables 5 and 6).

The differences between the two racial groups are shown in fig. 5. In the white population 39 percent had been to the dentist within a year prior to interview, as compared with 17 percent of the nonwhite population. The figures were reversed for the proportion of persons who had never been to a dentist, with 16 percent of white persons and 37 percent of nonwhite persons falling into this category. The differences occurred in each of the separate age groups. Among children 5-14 years of age, for example, 22 percent of white children and 63 percent of nonwhite children had never been to a dentist. Among persons 15-24 years of age, 52 percent of the white population had made at least one dental visit in the year prior to interview as compared with 27 percent of the nonwhite population (figs. 7 and 8).

The proportion of persons whose last dental visit had been within the year varied markedly with income, from a low of 19 percent among persons in families with annual incomes under $2,000 to a high of 54 percent among persons in families with incomes of $7,000 or more. The proportion of persons who had never been to a dentist was greatest, 24 percent, among persons with family incomes under $2,000 and least, 10 percent, for persons in the "$7,000 and over" family income group (fig. 6). By examining the data in tables 9 and 10, it can be seen that the differences among the income groups were consistent throughout the different age groups in the population.

When persons are classified according to the educational attainment of the head of the family, a pattern similar to that for family income is apparent. The proportion of persons who visited a dentist within the year prior to interview was lowest, 17 percent, in the educational group with less than 5 years of school, and highest, 57 percent, in the educational group which consisted of persons in families whose head of the family had completed at least one year of college. The proportion of persons who had never visited a dentist decreased with increasing education from 29 percent where the head of the family had less than 5 years of education to 13 percent where the head of the family had at least 1 year of college (fig. 7). The same strong relationship between education of family head and time interval since last dental visit appeared in each of the separate age groups.

Figure 8 projects for us the distributions of persons by time interval since last dental visit according to a cross-classification of family income and education of family head. From the data presented, it appears that both family income and education of family head are independently related to the dental care

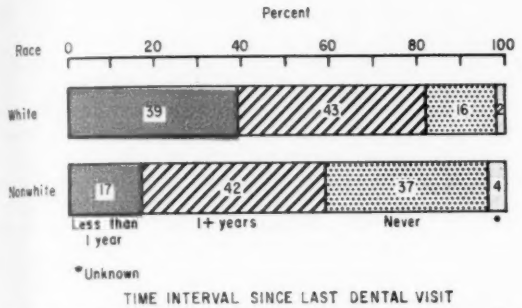


Figure 5. Percent distribution of persons by time interval since last dental visit according to race.

variable. Within income groups, the proportion of persons visiting a dentist in the past year increased with education. Within education groups, the proportion of persons with recent dental care was directly related to amount of family income. The proportion of persons who have never visited a dentist varied inversely with income and education within each age group. This relationship is somewhat obscured among all age groups combined because of the effect or differences in the age distributions in the four income-education categories.

Number of Dental Visits

During the year July 1958-June 1959 the question "How many times altogether in the past 12 months did you go to a dentist?" was asked. In response to this question, 60 percent of the population replied that they had not made any dental visits; 16 percent indicated 1 dental visit; 11 percent had 2 visits; 4 percent, 3 visits; and 9 percent, 4 or more visits. Thus only about one fourth of the population had been to their dentist at least twice during the year.

Table A shows the population distributed by

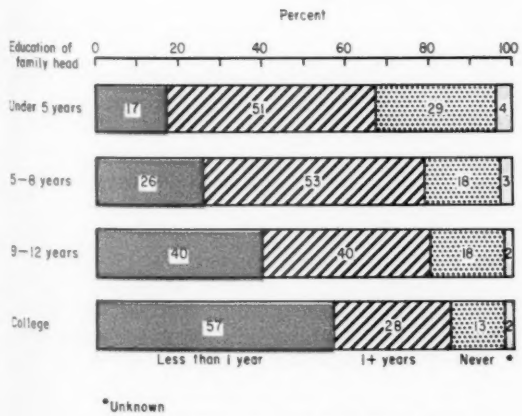


Figure 7. Percent distribution of persons by time interval since last dental visit according to education of family head.

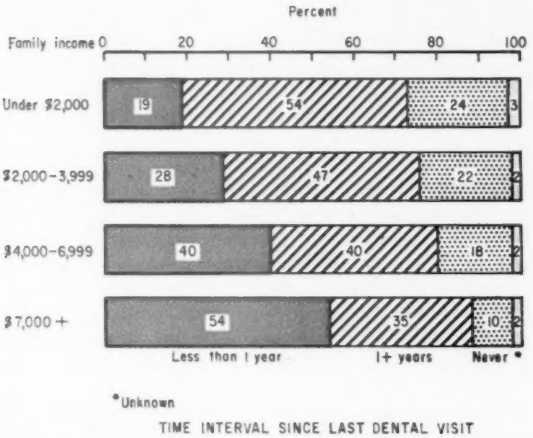


Figure 6. Percent distribution of persons by time interval since last dental visit according to family income.

number of dental visits made during the past year according to age. Those in the age range 5-44 visited the dentist more frequently than older or younger people. About one third of the 5-44 year age group had visited the dentist 2 or more times during the 12 months prior to interviewing as compared with one fifth of those 45-64 and one tenth of those 65 years of age and over. This decrease in the number of dental visits among older persons is to be expected in view of the high percent of edentulous persons in this age group.

In table B, it can be seen that the responses to the question concerning the number of dental visits in the past year were, in general, consistent with the responses to the question concerning time interval since last dental visit. Males had a greater proportion of persons reporting no visits and a smaller proportion reporting 4 or more

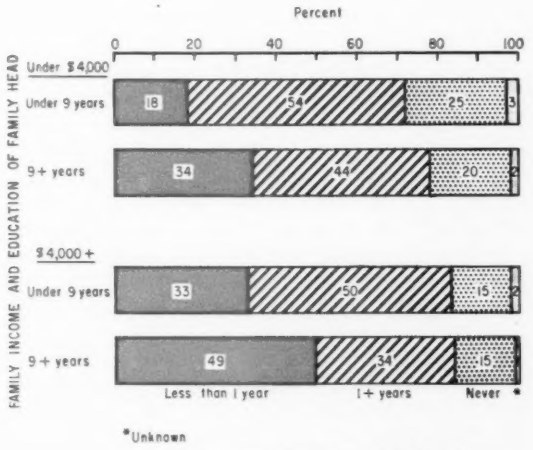


Figure 8. Percent distribution of persons by time interval since last dental visit according to family income and education of family head.

visits than did females. The proportion of persons with no visits was lowest among urban dwellers and highest among rural-farm residents. The reverse was true for the proportion of persons visiting the dentist 4 or more times during the year preceding the interview.

Southern residents had a larger proportion reporting no visits in the year and a smaller proportion reporting 4 or more visits than any of the other regions. The proportion of persons reporting no visits was greater among nonwhite persons in the population than among white persons, 80 percent as compared with 57 percent.

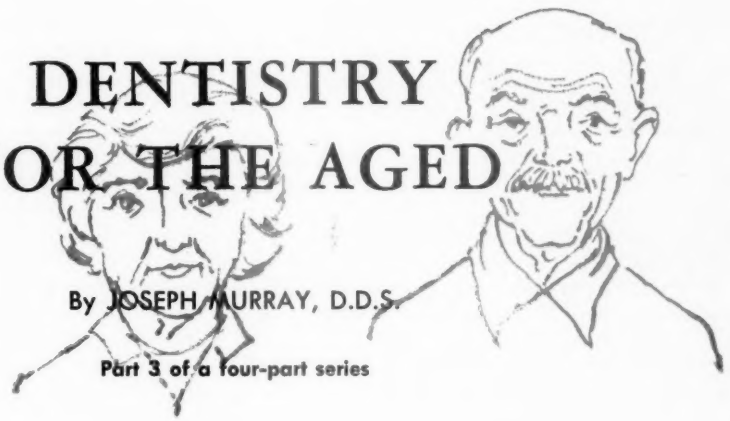
For both family income and education of family head, the proportion of persons having no dental visits decreased with increasing income and with increasing education, while the proportion of persons having 4 or more visits increased with increasing income and education.

When family income and education of the family head are cross-classified, it appears that each bears an independent relationship to number of dental visits. Within income groups, the proportion of persons with no dental visits decreased and the proportion of persons with 4 or more visits increased with increasing education. Similarly within each education group, the proportion of persons with no visits decreased and the proportion of persons with 4 or more visits increased with increasing income.

By examining detailed tables pertaining to number of dental visits during the past year, it can be seen that the differences described above exist in the separate age groups as well as for all ages combined.

Table B. Percent distribution of persons by number of dental visits during the year according to demographic characteristic: United States, July 1958-June 1959

Characteristic	Number of dental visits during the year					
	Total	0	1	2-3	4+	Unknown
Total persons	100	60	16	15	9	1
Sex						
Male	100	62	16	14	8	1
Female	100	58	16	15	11	1
Residence						
Urban	100	58	16	15	11	1
Rural nonfarm	100	61	16	14	8	1
Rural farm	100	67	15	12	5	1
Region						
Northeast	100	54	15	16	14	1
North Central	100	59	17	15	9	1
South	100	67	15	12	6	1
West	100	57	17	16	10	1
Race						
White	100	57	16	16	10	1
Nonwhite	100	80	11	5	3	1
Family income						
Under $2,000	100	78	11	7	4	1
$2,000-3,999	100	69	14	10	7	1
$4,000-6,999	100	57	17	16	10	-
$7,000+	100	42	20	23	15	1
Education of family head						
Under 5 years	100	82	9	5	3	1
5-8 years	100	70	13	10	7	1
9-12 years	100	57	17	15	10	1
College	100	38	21	25	15	1
Family income and education of family head						
Under $4,000						
Under 9 years	100	79	10	6	4	1
9+ years	100	65	16	12	8	-
$4,000+						
Under 9 years	100	63	15	12	9	-
9+ years	100	47	19	21	13	-



DENTISTRY FOR THE AGED

By JOSEPH MURRAY, D.D.S.

Part 3 of a four-part series

It is the opinion of Dr. Sol Silverman that there are relatively few men trained or dedicated to the geriatric problem and that within this field the greatest effort seems to be directed toward psychodynamics. In addition, most evaluations are in the nature of the effects of growing old, and very little is offered in the way of therapy.

He differentiates between senescence and senility. The former is normal physiologic aging, while the latter may be defined as pathologic. Both may not conform to chronologic aging.

Differentiation of these terms is important, for senescent changes are often subclinical and may be the cause for unsuspected problems, while senility is usually obvious to the clinician. Evidently, it is in the cell, itself, that the answer to the perplexing problem of aging must be sought.

Dr. Silverman assumes that aging conforms in general with chronology and therefore most attention must be focused on the older one-third of the population who are the main denture-wearers and the group where most concern arises. From the patients in this category come the greatest cellular changes that may adversely affect the acceptance of a prosthesis, no matter how mechanically perfect and well-fitting it may be.

There are physio-anatomic changes, called senescent degenerations, that occur in every organ and tissue in the body, leading to dehydration and waste of tissue that is not repaired at all or replaced by tissue of another character.

Dr. Silverman points out that in the gastrointestinal system, the stomach and intestines may become dilated along with progressive atrophy of the glands, thus contributing to some of the problems of absorption and bowel irregularity, so characteristic of the aged.

There is achlorhydria (absence of free hydrochloric acid from the gastric juice). As a result, the absorption of calcium, iron and vitamin C are altered. Also, the activity of proteolytic enzymes may be reduced.

Progressive atrophy, fibrosis, sclerosis and fatty degeneration of the glands are quite common. In

addition, diminished functions with subsequent alterations in metabolism, nutrition, enzymatic and hormonal relationship contribute to the aging process.

Dr. Silverman adds that the cardiovascular system often shows a decrease in blood volume and hemoglobin, vascular changes and loss of cardiac efficiency —depriving tissue of optimal oxygen supplies, an underlying basis for senescence, in the opinion of many geriatricians.

The effect on the respiratory system is usually a gradual fibrosis causing breathing difficulties.

The loss of elasticity and resiliency from dehydration frequently impairs the function of the musculature.

In the skeletal system, there is a decline of the organic matrix, causing susceptibility to bone fracture and difficulty of healing.

As for the skin, there is a tendency for it to become dry and inelastic, with atrophy of the sebaceous and sweat glands.

Most marked are the changes in the nervous system. Inability of the nerve cells to divide or reproduce are factors in the bizarre and nonspecific clinical complaints usually categorized as functional, but actually organic.

The previous survey is mainly illustrative of the degenerative changes contributing to physiologic aging. How about the effects on the oral cavity?

Bone is affected to a great degree because, in senescence, anabolism decreases while catabolism increases, laying the foundation for a dynamically changing base that prevents dentures from being stabilized in function. Furthermore, a diet usually low in protein impairs production of bone matrix that contains about 20 percent of the body protein. In addition, calcium content of the bone may be decreased because of defective absorption from the gastrointestinal tract coupled with the inability of the bone to retain calcium.

Connective tissue undergoes fibrotic change. Together with an altered metabolism, there is a greater susceptibility to trauma and decreased repair power.

As for the epithelium, there is a reduction in growth and repair functions and increased susceptibility to irritation.

Malignant degeneration of squamous -cell epethelium is an important change and a dangerous problem associated with the senescent patient and accounts for about 90 percent of oral cancer. To the dental practitioner, this fact is of vital importance.

Whether nervous tissue is affected by systemic influence or by local changes through lowering the threshold of pain, and metabolic changes, without physical or organic lesions, are questions still unanswered. Yet, the dentist cannot dismiss the patient, especially the postmenopausal type, as a psychoneurotic, because she complains of altered taste and burning sensations.

Dr. Joseph S. Landa describes burning and dryness of the mouth as two symptoms which are so frequently concurrent that they have come to be associated as a clinical syndrome. His hypothesis is that it is:

(1) A purely imaginary disease
(2) An imagination created disease, the result of intense neurosis
(3) A definite organic disease

Probably all these etiological factors contribute to the causation of the symptom-complex known as mouth-burning. To what extent is not established, says Dr. Landa.

He is aware that some investigators believe that blood dyscrasias, diseases of the kidneys and bladder, and pathologic changes in the cerebro-vascular system may induce burning mouth.

A temporary spasm in a little blood vessel of the brain or a minute stroke resulting from a clot; and or course, a severe stroke and arteriosclerosis, per se, may lead to these symptoms.

He quotes Dr. Alvarez, who states that a slight injury to the brain or to some nerve tract or nerve supplying the mouth and tongue may be the etiological factor for mouth-burning. This may tend to clarify Dr. Landa's observation that "extensive alveolectomies and the surgical removal of deeply impacted teeth that necessitate considerable bone destruction, have been followed by symptoms of mouth-burning." It is also logical to assume in these instances that nerves supplying the oral mucosa or tongue were either severed or damaged. Dr. Landa concludes that lack of vitamins may also be considered a contributing factor.

For treating the patient with burning mouth, he prescribes local treatment, diet and psychotherapy, in addition to common sense, sympathetic understanding and patience.

The local treatment consists primarily in remaking dentures, paying utmost attention to mechanics, esthetics, and phonetics. "A patient suffering from this condition needs the best type of dentures that can be produced."

Rinsing the mouth with a solution of tincture of iodine in water (five drops to one-half glass of water) and painting the burning area with a 1 percent solution of silver nitrate have helped. Also, a solution of 50 percent glycerin in water, flavored with lemon juice, aids in relieving both the burning and dry sensations.

As for diet and psychotherapy, the patient should be directed to the proper medical authorities for consultation, advises Dr. Landa.

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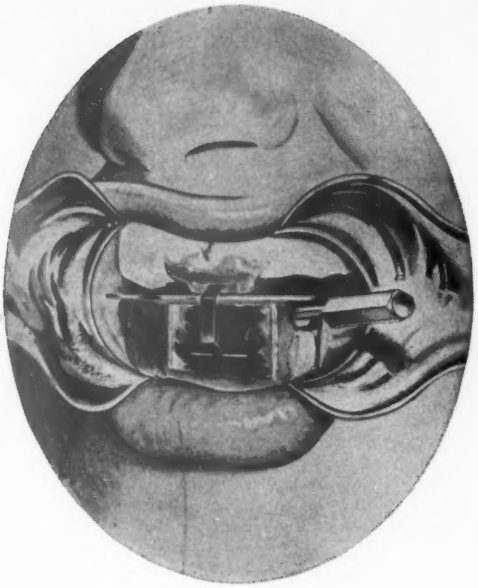
PART 4 – NEXT MONTH

HOW'S YOUR BITE?



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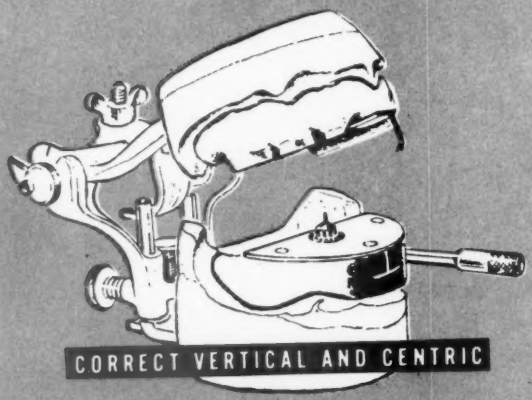

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